AFRD ES&H Operations Committee 71B-290 Conference Room April 4, 2008 2:00 – 3:00 PM

Minutes

Attendees: Stefano De Santis, Sharon Hernandez, Daryl Horler, Neil Landau, Steve Lidia, Tom McVeigh, Prabir Roy, Tom Scarvie, Pat Thomas, Weyland Wong

1. Ergonomics Update – Ira Janowitz

"Good ergonomics" doesn't mean always sitting up straight. Reclining positions are OK if the back and arms are comfortably supported.

Ergonomics problems are common. Dr. Lichty did a survey and found that about 1/3 of EH&S computer users experienced discomfort at some time in the last year, and about 1/6 were currently experiencing discomfort. The right hand and wrist are the most common problem areas, due to mousing.

Ergonomics applies not just to desktop computers but also to laptops and shop and lab equipment.

Evaluations are recommended whenever a person has a new job, hardware, work location, discomfort, or an injury or illness (whether or not work related) that affects the way the person works. There is a new on-line self-evaluation system available called Remedy Interactive. This system replaces the old ergonomics training CDs.

Equipment is not the only factor – it is important to get up, move around, and stretch at least 5 minutes per hour. There is a stretch monitoring and reminder system, RSI Guard, which is also available. The system has a feature that allows monitoring of employee activity by Supervisors, but this feature can be turned off. Supervisors should try to plan ahead for work crunches to avoid overloading people with work, which may prevent them from taking breaks.

Remedy Interactive scores a person's risk of injury based on responses to questions about posture and discomfort. The scoring system is not perfect on individual questions but the overall rating seems to be reasonably accurate for screening purposes. The system includes training elements as well as evaluation. It provides e-mail feedback and more detailed information through the website. In a pilot test with Information Technology Division, about 3/4 of the participants made some workplace adjustments and/or behavior changes. Ergonomics Advocates and Division Safety Coordinators will be able to see status reports for their people, and Supervisors will be able to see their employees' and guests' reports. The system only captures data for one workstation per employee. People who use multiple workstations should evaluate the one that gives them the most problems. People who work at home or in other locations are encouraged to send digital photos to the ergonomics team.

There are many different equipment options available to make working at a computer more comfortable. The Ergonomics Display Center in Bldg. 75B has new products, including a magnifying mouse. Jason Martin is the ergonomics technician. He is at the display center most of the time, but it is a good idea to make an appointment to be sure he will be there and have time to help you.

There are ergonomics discussion and training slides available through the "1 Minute 4 Safety" website that can be used for group safety meetings.

People who score "red" or "yellow" on Remedy Interactive will be scheduled for a follow-up ergonomics evaluation. A professional ergonomist will visit everyone who scores "red". Ergo advocates will follow up with people who score "yellow". These on-site evaluations will continue to be tracked in the Ergo database. This database has an improved report format and a product information catalogue.

2. ES&H News and Lessons Learned

- **Group JHAs** John Seabury conducted the first training session for AFRD supervisors. A second training session is scheduled on May 15th.
- **Penetration Permit policy change** Mike Dong sent a memo to everyone who has taken the penetration permit training to inform them of an important change in policy. All concrete surface penetrations (including penetrations of 1 5/8' or less) now require surveying prior to the start of work. There is a 10-minute refresher video about penetration permits available on the Facilities web site. It should be shown to all subcontractors doing surface penetration work at LBNL.
- Crosby shackles alert Counterfeit lifting shackles have been found in Europe that are labeled "CROSBY" in all capital letters. The genuine Crosby shackles have only the "c" capitalized. The counterfeit shackles can fail at as low as 40% of the stated rating.
- Quarterly supervisors' reports due Reports of supervisor safety plan activities for the period of January March 2008 are now due. Please summarize the information on the forms and send them to Pat Thomas by the end of the month.
- Status of LOTO reviews -- Pat still needs to receive LOTO inspection reports for: EBIT (Daryl Horler), HCX and NDCX (Paul Bish), and the Supercon cabling machine and short sample test (Tom McVeigh). The Supercon power supply has a new LOTO procedure that was recently reviewed by Keith Gershon.

3. Program Forum

FS&IBT – Fusion is preparing the STS 50 (also known as Hot Plate Source Test Stand) AHD for review. IBT has received a donation of equipment from LLNL that will be installed at Test Stand 11.

Supercon – The magnet testing AHD was updated and reviewed. They are finishing work on coil 3 for the HD2 magnet. Roy Hannaford and Shlomo Caspi are going to CERN to train technicians.

CBP – Stefano had a question about how to get items seismically secured. You can submit a work request. Ask your Program Head for an account number.

AFRD Administration – The budget problems are resulting in a reduction in administrative staff. Adam Bradford will be moving to Chemical Sciences Division. Parish Epps will be leaving us in mid-May. It will be necessary for the scientific and technical staff to do more for themselves to avoid overloading the remaining administrative assistants. There will be a new publications database in April. General Sciences will be pilot-testing the new travel system.

Engineering – Both Remedy Interactive and a new LOTO refresher class requirement are starting to show up on Training Profiles. Both classes are available on line. There are some important new chapters coming to PUB-3000 soon. One covers welding, thermal cutting, and joining. Another chapter covers machine tools and lab equipment with similar hazards and shop safety. There is also a chapter

being developed on subcontractor and vendor safety. For more information, see your Safety Review Committee representative (Weyland Wong for Engineering, Derun Li for AFRD) or the SRC secretary (Pat Thomas).

Next Meeting:

May 2, 2008, 2:00 PM, Bldg. 71J Conference Room

AFRD ES&H Operations Committee 71J Conference Room May 2, 2008 2:00 – 3:00 PM

Minutes

Attendees: Ken Barat, Stefano De Santis, Daryl Horler, Neil Landau, Tom Scarvie, Peter Seidl, Pat Thomas, Csaba Toth

1. ES&H News and Lessons Learned

• Lessons Learned:

- Transporting heavy items in pick-ups An Information Technology employee loaded a large spool of computer cable in the back of a truck at the Bldg. 904 warehouse and secured the spool in place with a rope, and drove off. As he began to merge onto the freeway, a car in front of him stopped abruptly, forcing the employee to hit the brakes. The cable spool broke loose and hit the rear window of the truck, breaking the window. Trucking straps should be used to secure heavy items in truck beds before moving them.
- o **Bumping knees on desk supports** Many Steelcase desk side tables have a 5.75" cantilever bracket that extends below the table, providing only 24" of clearance. An employee at the ALS was using an adjustable computer table between two Steelcase side tables. He swiveled his chair, struck his knee against the bracket, and broke his kneecap. When evaluating workstations, be sure there is enough room to provide knee clearance for the user. Chairs with carpet casters may move too rapidly on hard surfaces, such as floor mats. If you notice you keep having "near misses" with bumping something in your work area, stop and do something about it.
- **Job Hazards Analyses** John Seabury will provide a second training session for AFRD Work Leads on May 15th on how to develop Group JHAs. We should plan to finish our Group JHAs by the end of May. During June September, everyone will be developing his or her Individual Baseline JHAs.
- Summer students and guests Supercon is expecting a high school student who will be observing experiments and entering data. ALS Accelerator Physics is expecting a student who will be working with Fernando Sannibale. Fusion is expecting a high school teacher and two college students. LOASIS has two guests coming. Ken Barat has two French high school students who are checking eyewear at laser labs.
- Waste minimization Maram Kassis and Pat Thomas met to review AFRD's hazardous waste generation this year and discuss ideas for waste minimization. Our best opportunities seem to be (1) identifying materials for recycling during the Hilac removal, (2) identifying reusable materials and non-hazardous materials during chemical cleanouts, (3) ensuring paper recycling bins are available as people clean out their offices before moving, and (4) contacting Mark Lasartemay to pick up empty aerosol cans. If you have other waste minimization ideas, please contact Pat Thomas.

Quarterly supervisors' reports and LOTO reviews overdue –

- We still need second quarter Supervisor Safety Plan activity reports from FS&IBT, LOASIS, and Division management.
- We still need LOTO inspection reports for the EBIT experiment in Bldg. 16 (Daryl Horler) and the cabling machine and short sample test facility in Bldg. 52 (Tom mcVeogh).

Emergency Preparedness –

- Consultants from Alpha Track are doing an emergency planning study for LBNL and may be asking Building Managers about the types of chemicals used and stored in their buildings.
- o If you need more of the new red Emergency Response Guides for your areas, contact Ken Barat or Pat Thomas we have lots of them! Be sure to fill in the blanks provided for local information for your areas.
- LBNL will be celebrating Emergency Preparedness Week during June 9 –
 13. The activities will include:
 - **June 9th, 10 AM Earthquake drill.** Please be sure your Building Emergency Teams are ready.
 - **June 10th Emergency Preparedness Fair.** There will be games, prizes, exhibits, etc. at the Cafeteria lawn from 11 AM 2 PM.
 - **June 11**th earthquake lecture by Dr. Hutchings and Fred Angliss.
 - June 12th High Angle Rescue Team drill and demonstration.
 - **June 13**th lecture on Fritz Institute study of Bay Area earthquake preparedness.
- Pandemic shutdown planning Dr. Peter Lichty has been working with a committee of local government agencies planning what to do if there is a widespread outbreak of "bird flu" or other serious contagious disease. There may be shutdowns of schools, public gatherings, and major workplaces. Dr. Lichty is asking us to think about whether we have any operations that would require someone to enter the site during a shutdown to prevent safety hazards, equipment damage or loss of essential research materials. He also wants to know about any processes that would be difficult to re-start following a prolonged shutdown.
- Laser safety audit update DOE will be conducting a laser safety audit of selected LBNL labs on June 24 and 25. They will be auditing to the 2000 ANSI standard.

2. Program Forum

ALS Accelerator Physics – ALS is planning to expand the scope of their QUEST activities this year to include more assessment of safety systems. Tom Scarvie will check with David Robin to see if they plan to do a Group JHA. There will be a seismic construction project during the shutdown that may result in some access restrictions.

CBP – Stefano De Santis is checking CBP areas to ensure they have the new Emergency Response Guides posted.

Supercon will be doing long quad structure fabrication work in 77A. They have been doing 2 series of tests on the HD2 magnet and have been hi-potting coils.

LOASIS is working on updating their AHD. They just finished renewing their RWA. The radiation survey procedure was changed. They did a group clean up last week during a shutdown for construction activities.

FS&IBT has Mattheus Leitner and Bill Gath looking at improving scaffolding for work at the NDCX test stand.

DOE/BSO has been conducting an n audit of radiological safety. There are different levels of hazard defined by the types and amounts of materials stored in areas, and different safety requirements depending on the hazard level. They have been reviewing documentation and materials storage at the Bldg. 74 cobalt irradiators and the pit room. Some sources are being moved to LLNL. Chris Donahue recently left LBNL, so David Kestell is now the acting Radiation Safety Manager. Neil also said their was an ORPS report from the Bldg. 71 Hilac removal project last week because of overexposure of a subcontract worker to copper fumes.

Next Meeting:

June 6, 2:00 PM, Bldg. 71J Conference Room

AFRD ES&H Operations Committee 71J Conference Room June 6, 2008 2:00 – 3:00 PM

Minutes

Attendees:

- 1. ES&H News and Lessons Learned
- Lessons Learned:
 - **Defective tube furnace purchased from MTI Corporation –** A PI in Materials Sciences Division purchased a temperature controller for a tube furnace from MTI Corporation. The student receiving the device had some reservation s about its safety. Perhaps the first clue was that the switch was marked "OFF/NO". The Division ES&H Manager reviewed the device and found that the grounding was inadequate, so it was returned to the manufacturer for repairs. The equipment was sent back to the researchers with inadequate repairs. The Division electronics technician performed a detailed review and found several serious safety problems, including inadequate grounding, undersized wires, un-insulated posts and terminals, an input/output jumper, unapproved fuse, etc. The equipment was not approved by a Nationally Recognized Testing Laboratory. Lessons Learned: (1) NRTL certified equipment should be purchased whenever possible. (2) If uncertified equipment is necessary, contact Keith Gershon to have it checked before using. (3) Don't purchase equipment from MTI Corporation. If you have any of their equipment, take it out of service and contact Keith Gershon to have it checked.
 - o **Defective toaster oven in 71J** Alert employees noticed a burnt breadcrumb odor around the toaster oven in 71J. They checked it and found that the oven was still warm even when it was "off" because the interlocks were not working. The oven was taken out of service. Lesson Learned: We have quite a few old appliances around LBNL and some may be worn out or not up to current standards. Please be alert to any signs that they may not be functioning properly, and take them out of service if there are any doubts about their safety.
- Safety staff schedules Pat Thomas will be on vacation for the next two weeks (June 9-20). Ken Barat is on vacation June 6-9, and will be at SLAC June 16-20. Steve Lidia will be your primary AFRD ES&H contact.
- JHA status
 - O Group JHAs have been completed and activated for 7 work groups: AFRD Administrative (Sharon Hernandez), AFRD Fusion Experimental Physicists (Peter Seidl), AFRD IBT Experimental Physicists B. 5, 16, 52 (Joe Kwan), AFRD Magnet Test Facility (GianLuca Sabbi), Guests AFRD IBT Experimental Physicists B53 (Andre Anders), and Work Lead for AFRD IBT Experimental Physicists B53 (Andre Anders).
 - o There are 9 other AFRD Group JHAs in draft status.
 - John Seabury has been invited to the June 17th AFRD Program Heads meeting to provide updated information and answer questions.
 - The goal is to have all the Group JHAs completed and active by June 23, so we can activate the Individual JHA system for AFRD. If you have questions or problems, send e-mails to jha@lbl.gov to reach John Seabury and the database programmers.

- A tip from Sharon Hernandez: hazards and controls for group JHAs should be the "lowest common denominator" of hazards and controls shared by everyone in the group. When supervisors create Individual JHAs for people, they will be able to add hazards and controls, but not remove them.
- For the next two weeks, please add new people to the appropriate Group JHAs and print them out to get training requirements. Also check any authorizations the new people will be working under (AHDs, RWAs) for required training. JHQs and Individual JHAs are not available at this time.
- o 2 training sessions have been set up with John Seabury to teach AFRD supervisors how to create Individual JHAs for their guests and employees. The sessions will be on June 24 and July 22, at 1:30 PM in 2-100B.
- There is a Contract Performance Measure to complete 75% of all Individual JHAs by September 30, 2008. This is important. If LBNL misses the goal, we may have a reduction in LDRD funding next year and/or an earlier recompetition of the contract.
- The next steps will be to decide how we want to do Task-Based JHAs (similar to our Line Management Authorizations), and to work with Industrial Hygiene to figure out how to get all the Exposure Assessments called out on the JHAs completed and documented.
- Quarterly supervisors' reports People who have Supervisor Safety Plans should be finishing up their 3rd quarter activities and be prepared to report those activities in early July.
- LOTO reviews We only have one left to do, for Thomas Schenkel's EBIT experiment. Paul Bish was going to try to do it, but if he can't find time, Prabir Roy has volunteered to help.
- First Aid program changes Richard DeBusk has hired a new person, Connie Giroux, who will be working on improving the first aid program. Connie will be working with Rocky Saunders to ensure all the "emergency trauma kits" are inspected. Connie will also be evaluating the first-aid and CPR training. If you have ideas about how to improve first aid at LBNL, please send them to Richard DeBusk
- Emergency Preparedness Week The drop/cover/hold/ evacuate earthquake drill will take place at 10 AM Monday, June 9th. Please plan not to be in the middle of any critical experiments that are difficult to interrupt at this time. Watch for Today at Berkeley Lab announcements for other events of the week, including an Emergency Preparedness Fair, a rescue demonstration, and two lectures.
- Laser safety walkthroughs Lab Management representatives have been visiting laser labs with Ken Barat. They have particularly been looking at signage and documentation of compliance.
- MESH review AFRD will be reviewed this summer. Scott Taylor from Life Sciences is the MESH Team leader. We will be providing information and scheduling interviews and walkthroughs as requested.

2. Program Forum

- Administration The staff is coping with the recent reduction of two people. (Parish Epps had her baby. It's a boy!) The workload is not too heavy right now because there are a lot of scientists on vacation or travel. Wes Tabler has been working hard doing demonstrations of the new travel system.
- ALS Accelerator Physics ALS is finishing up their shutdown work and starting up normal operations. There was a problem during shutdown with a seismic retrofit contractor taking down a radiation hazard warning rope. The incident is being investigated. They are reviewing the adequacy of signage, supervision, and training of the contractors. There was also a safety incident in Bldg. 7. Facilities personnel advised the people working in the building that they could go ahead and remove

- some flooring material themselves and provided tools. It was later learned that the flooring contained asbestos.
- **CBP** Most people are away on vacation or working off-site. The people who are here are cleaning up the BEG lab.
- FS&IBT The Fusion group has been working on NDCX diagnostics. A graduate student successfully produced data for his doctoral thesis. They are working on two Group JHAs, experimental and office. They are looking at whether the fusion and IBT JHAs can be combined. IBT has been cleaning up Test Stand 11 and getting ready to install the high voltage equipment from LLNL. They may need some additional technical staff for the Test Stand 11 project.
- LOASIS LOASIS has been working on their AHD renewal. They are concerned that the AHD database may be shut down for enhancement before they can get it signed off. If it looks like this may happen, they should contact Larry McLouth for guidance on what to do.
- **Supercon** Supercon has been doing assembly in Bldg. 77A on the long quad structure for LARP. The HD2 magnet is scheduled for testing next week. They do not anticipate any significant changes in hazards or controls for the test. They are reviewing data from the previous test and there is a possibility that it may have set a new record.

Next Meeting:

July 11, 2:00 PM, Bldg. 71J Conference Room